

In the Claims

1. (Previously presented) A method of coating a tubular implantable medical device having a length and a longitudinal axis, comprising depositing a coating composition on an applicator, rotating the applicator over the length of the device to apply a first stripe of coating composition to a surface of the device, rotating the device about its longitudinal axis, and then applying a second stripe of coating composition to the surface of the device.
2. (Previously presented) The method of Claim 1, wherein a layer of coating composition on the surface of the applicator has a thickness of about 2.5 microns to about 1000 microns.
3. (Previously presented) The method of Claim 1, wherein a layer of coating composition on the surface of the applicator has a thickness of about 25 microns to about 100 microns.
4. (cancelled)
5. (Previously presented) The method of Claim 1, wherein a layer of coating composition is transferred to an outer surface of the device.
6. (Original) The method of Claim 1, wherein the viscosity of the coating composition is about 10 centipoises at ambient temperature and pressure to about 1000 centipoises at ambient temperature and pressure.
7. (Original) The method of Claim 1, wherein the device is a stent.
8. (Previously Presented) The method of Claim 1, wherein the coating composition further comprises a therapeutic substance.

9. (Withdrawn) A method of coating a tubular implantable medical device, the medical device having a bore, comprising:

placing an applicator having an applicator surface containing at least a polymer dissolved in a solvent into the bore; and

applying the polymer dissolved in a solvent to the bore.

10. (Cancelled).

11. (Cancelled).

12. (Previously presented) The method of Claim 1, wherein the rotational speed of the device is from 1 rotation per minute to 200 rotations per minute.

13. (Previously presented) The method of Claim 1, wherein the depositing a coating composition on the applicator step includes leveling the composition so that a layer of coating composition has a uniform thickness.

14. (Withdrawn) The method of Claim 13, wherein leveling the composition comprises directing a gas to the coating composition, the gas having sufficient air flow to reduce the profile of the composition.

15. **(withdrawn - currently amended)** The method of Claim 13, wherein leveling the coating composition comprises positioning a barrier in close proximity to an outer surface of the metering roller and at a position before the composition reaches the device such that the movement of the metering roller outer surface past the barrier causes the coating composition to level to the uniform thickness before being transferred to the applicator.

16. (Canceled)

17. (Previously presented) The method of Claim 18, wherein a surface of the applicator receiving the coating composition is cylindrical in shape.

18. (Previously presented) A method of coating a tubular implantable medical device, comprising:

rotating an application roller in a first direction;

providing a controlled deposition of a coating composition onto a surface of the rotating application roller by depositing a mass of coating composition onto a rotating metering roller disposed in close proximity to, or in contact with the surface of the application roller; and

transferring the coating composition from the application roller to the device including the steps of disposing the device in close proximity to, or in contact with the surface of the application roller holding the deposited coating composition, and rotating the device in a second direction, opposite to the first direction so as to cause the coating composition to be transferred from the application roller to the device as the application roller and device rotate in the first and second directions, respectively.

19. (Canceled)

20. (Previously presented) The method of Claim 18, wherein the composition is applied to an outer surface of the device.

21. (Previously presented) The method of Claim 18, wherein the rotational speed of the device or application roller is between 0.1 rotations per minute to 200 rotations per minute.

22. (Previously presented) The method of Claim 18, additionally comprising leveling the composition on the surface of the applicator so that the layer has a uniform thickness.

23. (Previously presented) The method of Claim 18, wherein the application roller has a radius of curvature about equal to a radius of curvature of the device.

Claims 24-40. (Canceled).

41. (Withdrawn) A method of coating a tubular implantable medical device having an outer surface, whereby a surface portion forms a portion of the outer surface and the surface portion extends along the longitudinal axis of the medical device, the method comprising:

submerging the tubular implantable medical device into a coating composition including placing only the surface portion in contact with the coating composition; and rotating the submerged device about the longitudinal axis.

42. (Previously presented) The method of Claim 18, wherein the surface of the applicator roller includes vertical grooves, horizontal grooves, grooves with a zigzag pattern, grooves and/or a discontinuous pattern.

Claims 43 – 44 (Canceled).

45. (previously presented) The method of Claim 1, wherein the device is supported on a mandrel.

46. (Canceled).

47. (previously presented) The method of Claim 1, wherein the applicator rotates in a clockwise direction and the tubular implantable device rotates in a counter-clockwise direction.

Claims 48 – 50. (Canceled).

51. (previously presented) The method of Claim 1, wherein the applicator is partially submerged in a reservoir comprising a polymer and a solvent.

52. (previously presented) The method of Claim 1, wherein the applicator rotates at about the same rate as the device.

53. (Canceled).

54. (Withdrawn) The method of Claim 9, further including the step of rolling the applicator around an inner circumference of the bore to thereby apply the polymer dissolved in a solvent to the bore.

Claims 55-57 (Canceled).

58. (Withdrawn) The method of Claim 41, wherein the placing step further includes suspending the device over the coating composition such that only the surface portion is in contact with the coating composition.